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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/024,896	12/17/2001	Andrew W. Blackett	6270/72	8784

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BRINKS HOFER GILSON & LIONE
P.O. BOX 10395
CHICAGO, IL 60611

EXAMINER

RODRIGUEZ, PAUL L

ART UNIT	PAPER NUMBER
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2125

DATE MAILED: 11/10/2003

7

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/024,896

Applicant(s)

BLACKETT ET AL.

Examiner

Paul L Rodriguez

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. The amendment filed 8/25/03 has been received and considered. Claims 1-48 are presented for examination.
2. The examiner of record has changed from Walter R. Swindell to examiner Paul Rodriguez.

Claim Objections

3. Claims 1, 3-9, 15, 32-38, 45, 47 and 48 are objected to because of the following informalities:

Claim 1 line 8 refers to "said sensor", previously "at least one sensor", reference to the same element should remain consistent, could create an antecedent problem in the claims.

Claims 3, 4, 7-9, 32-38 are objected to because they use acronyms, the use of acronyms could render the claim indefinite.

Claims 5-9 are objected to as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, it is unclear whether the phrase contained in the parenthesis is part of the claimed subject matter or not.

Claim 15 depends from claim 13 and claims a "second digital data", claim 1 and 13 make no reference to a first digital data, therefore why would you have a second.

Claim 45 line 1 refers to "said first digital network", never making reference to a first.

Claim 47 refers to "a master device", claim 46 also claims "a master device", if referring to the same element then the second instance should use "said" or "the".

Claim 48 refers to "to a said command", previously "a command", "a said command" is unclear.

Appropriate correction is required.

4. The examiner has provided a number of examples of the claim deficiencies in the above, however, the list of deficiencies may not be all inclusive. Applicant should refer to these as examples of deficiencies and should make all the necessary corrections to eliminate the claim objections.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-48 are rejected under 35 U.S.C. 102(b) as being anticipated by Hart et al (U.S. Pat 6,005,759). The claimed invention reads on Hart et al as follows (essentially the same as the previous examiner of record).

Hart discloses (claim 1, 17, 26, and 46) an energy meter (meter is defined as “one that measures” or “instrument or means for measuring, reference number 10) for managing the distribution of electrical energy (col. 3 lines 50-67), said meter comprising at least one sensor coupled with an electric circuit and operative to sense at least one electrical parameter in said electric circuit (col. 10 lines 19-52) and generate at least one analog signal indicative thereof (figure 3B, col. 10 lines 11-52), a housing (reference number 20 figure 1) at least one analog to digital converter located in said housing (reference number 315, col. 9 lines 1-10 state that controller 19 performs quality monitoring function, col. 10 lines 19-52 address the analog to digital converter in conjunction with the power quality monitoring, examiner considers 315

Art Unit: 2125

inside the housing is inherent) and coupled with said sensor and operative receive said at least one analog signal (col. 10 lines 19-37) to convert said at least one analog signal to at least one first digital signal (col. 10, lines. 19-42), a communications port located in said housing (reference number 17, 62-68, 312) and operative to facilitate communications of at least one second digital signal between said energy meter and a slave device coupled with said energy meter using a first protocol (FIG. 2A, elements 62-68, col. 7 lines 5-35) a processor located in said housing (reference number 19) and coupled with said at least one analog to digital converter (col. 9 lines 1-25, col. 10 lines 11-52, figure 3) and further coupled with said communications port (figure 1 reference number 19 connected with 17), said processor operative to perform a power management function on said at least one second digital signal and generate an output result (col. 8 line 29 – col. 9 line 10) and a server module located in said housing (reference number 17 connects 20 and 30 to the substation 10, 10 provides collected data, col. 7 lines 16-20) and coupled with said processor and operative to facilitate communication of said output result to a client application over a digital network using a second protocol (FIG. 1, elements 20 and 30) to manage the distribution of electrical energy (col. 8 lines 42-62), (claims 2-10) the use of various protocols conforming to industry standards or variations thereof (col. 13, line 50 - col. 17, line 18), Regarding claims 11-12, Hart discloses the use of Ethernet and wireless networks (col. 4 lines 37-63), (claim 13) Hart discloses using at least one object oriented program module (FIG. 1, elements 22-29), (claim 14-16) the transmission of requests and signals comprising digital data (see flow diagrams of FIGS. 2B and 2C; and messages of Figs. 6A, and 6B), (claim 18-19) the use of slave devices (col. 5 lines 21-68), (claim 20-22) the generating of various messages (col. 9 lines 1-58), (claim 23-25) the use of an energy meter, along with the monitoring and control of loads (col. 1 lines 1-34), (claim 27) the application of the meter to revenue

Art Unit: 2125

monitoring (FIG. 1, element 20, where the off-line applications inherently provide analysis and monitoring based on data received from element 40), (claim 28) the use of slave devices (col. 5 lines 21-68), (claims 29-30) the use of RS232 and RS485 protocols (col. 5 lines 20-28), (claim 31-38) the use of various protocols conforming to industry standards or variations thereof (col. 13 line 50 - col. 17 line 18), (claims 39, 45) the export to other devices (FIG. 1, element 20 and 21), (claim 40) the performance of power management functions (col. 7 line 16 - col. 8 line 27), (claim 41-44) monitoring of various messages and the performance of various functions based wholly or in part upon those messages (col. 8 lines 29-53, col. 9 lines 1-58) and (claim 47-48) receiving commands and performing operations as a result of commands (FIG. 1, element 19 and 30).

Response to Arguments

7. Applicant's arguments filed 8/25/03 have been fully considered but they are not persuasive.

Regarding the objections to the title, it is withdrawn in view of the amended title.

Regarding the claim objections, examiner has pointed out numerous objections, therefore the objections remain.

Regarding the rejection under 35 USC § 102, Applicant argues that Hart et al fails to disclose basically all the limitations of the independent claims. Examiner disagrees and contends that the rejection as recited above teaches all of the applicant's claimed invention.

Applicant specifically argues that Hart et al "fails to disclose what electrical distribution management functions the IEDs 43 and 45 actually perform". Examiner relies on the Hart et al col. 3 lines 50-67 that states that Hart et al is an "energy management system" therefore it performs management. Examiner would also like to point out that the claim simply states,

“managing the distribution of electrical energy” and also does not claim any specific management functions.

Applicant argues that Hart et al is unclear as to what is being monitored for power quality, however examiner points out that Hart et al clearly discloses the power quality monitoring from col. 9 – col. 13. Applicant argues that Hart is unclear as to how the data reaches the intelligent controller 19 or what components of the intelligent controller 19 actually monitor power quality, again examiner points to col. 9 and 10 that discuss what elements are sensed and monitored which are both current and voltage. Applicant argues that Hart et al fails to disclose where the analog current and voltage signals are being sensed from in the electrical distribution system, again examiner directs applicant to col. 10 which specifically indicates what is being sensed and how.

Applicant argues that Hart et al fails to disclose that the intelligent controller 19 or IEDs 43 and 45 are performing the sensing function. Examiner relies on col. 9 lines 1-10 that states that the controller 19 performs power quality monitoring and col. 10 lines 19-52 that detail the sensing of voltages and currents, examiner contends that this alone discloses that the controller 19 performs the sensing function. Applicant further goes on to state that “neither the intelligent controller 19 nor the IED 43, 45 is shown by Hart to include an A/D converter 315”. Examiner disagrees, although not explicitly recited by the Hart et al reference, Hart et al clearly states that controller 19 performs power monitoring including sensing, Hart et al describes figure 3A as a functional block diagram of the controller 19, figure 3B is described as a block diagram of the power quality monitoring which is performed by the controller 19 and shows reference number 315 as part of the power quality monitoring. From this the Examiner has drawn the conclusion

Art Unit: 2125

that the Analog to Digital Converter is part of the controller 19 and therefore the arguments are not persuasive.

Applicant again argues that Hart et al “fails to disclose that the analog to digital converter, located in a housing, with the communications port, processor and server module receives the analog signal generated by the sensor that is coupled with the electric circuit, as claimed”. As addressed above, the examiner contends Hart et al does in fact disclose the analog to digital converter (315) is located in the housing (reference number 20 figure 1) with the communications port (figure 2A, reference number 17 and or reference number 312) processor (reference numbers 52, 301, 302, 308, 310, 317) and server module (col. 7 lines 16-20, teaches that 20 allows dial in service or online access to the substation, i.e. server for access to data) receives the analog signal generated by the sensor that is coupled with the electric circuit (col. 10 lines 19-32). Therefore arguing that the only disclosed signals that the controller 19 could receive are converted at the IEDs and that the analog to digital converter is not located in a housing containing the other elements is not persuasive.

Applicant argues further that Hart et al fails to disclose "...a communications port operative to facilitate communications of at least one second digital signal between said energy meters and a slave device coupled with said energy meter using a first protocol; a processor coupled with said analog to digital converter and further coupled with said communications port, said processor operative to perform a power management function on said at least one second digital signal and generate an output result." Hart et al disclosed that the communication with slave devices is used for accessing data (col. 2 lines 4-10) and is done via multiple protocols (col. 2 lines 29-51) for communications with the slave devices. Applicants claim language states that the first protocol is used for communications between the meter and a slave device coupled with

the meter, examiner relies upon the meter collecting data and sending to the substation controller, the substations are accessed either by centralized real time applications or distributed off line applications, because the off line applications require a dial in connection, multiple protocols are be required to communicate information from the meter to the remote device, therefore a first and second protocol are disclosed, the arguments are not persuasive.

Regarding dependent claims, applicant provided specific arguments. Examiner contends that the dependent claims are disclosed and anticipated by Hart et al as addressed in the above rejection, therefore the examiner maintains the rejection based upon Hart et al.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Carpenter et al (U.S. Pub. 2001/0039537) – teaches a data network for the sharing of meter reading and network management.

Collins et al (U.S. Pat 6,553,418) – teaches an energy management system that utilizes various protocols in a data network.

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

Art Unit: 2125

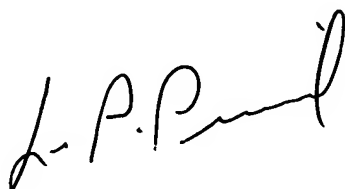
CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul L Rodriguez whose telephone number is (703) 305-7399. The examiner can normally be reached on 6:00 - 4:30 T-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo P Picard can be reached on (703) 308-0538. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9600.

PLR
11/5/03



Paul L Rodriguez
Examiner
Art Unit 2125

LEO PICARD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100